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ABSTRACT

This anthology of articles investigates and analyzes problems related to declining enrollment with emphasis on the state of New Jersey. It is intended to provide assistance to local New Jersey school districts in managing and preparing for enrollment decline. The first chapter provides an overview of declining enrollments in New Jersey and touches on the effects of declining enrollment on finance, personnel, facilities, and management. The second chapter explores patterns of enrollment fluctuation in New Jersey school districts from 1966-67 to 1976-77, concluding that enrollment decline has hit some areas of the state and some types of districts more severely than others. The third chapter outlines the policy options open to the states in responding to decline and reviews the changes in state-aid formulas that 19 states have made as a result of decline. In chapter 4 some ways of dealing with surplus facilities produced by declining enrollment are briefly reviewed. (Author/JM)

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AN ANTHOLOGY of NEW JERSEY STATE DEPARTMENT of EDUCATION RESEARCH ON DECLINING ENROLLMENTS

THE DECLINING ENROLLMENT PROJECT

STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION
DIVISION OF OPERATIONS
RESEARCH AND EVALUATION

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THE DECLINING ENROLLMENT PROJECT

AN ANTHOLOGY OF NEW JERSEY STATE DEPARTMENT OF EDUCATION RESEARCH ON DECLINING ENROLLMENTS

NEW JERSEY DEPARTMENT OF EDUCATION
225 WEST STATE STREET
TRENTON, NEW JERSEY 08625

FRED G. BURKE, COMMISSIONER

SEPTEMBER 1978

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STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION
225 WEST STATE STREET
TRENTON, N J 08625

OFFICE OF THE COMMISSIONER

Dear Colleague:

I am pleased to share with you this anthology of research products which investigate and analyze enrollment-related problems. This publication marks our initial efforts to provide comprehensive technical assistance to local districts in managing and preparing for enrollment decline, growth and/or fluctuation, via our on-going Declining Enrollment Project.

In carrying out the intent of the T&E legislation, and in fulfilling our commitment to the State Board of Education Priority VII, the Declining Enrollment Project was launched. The charge of the Declining Enrollment Project is contained in the following State Board Priority:

VII. STRENGTHEN THE EFFECTIVENESS AND EFFICIENCY OF EDUCATION BY ADDRESSING CONCERNS REGARDING GOVERNANCE AND MANAGEMENT.

It is a priority to strengthen the effectiveness and efficiency of education by addressing concerns regarding governance and management of local districts and of the Department itself. These concerns include the feeling that communication between educators and legislators should be improved. Problems of fiscal stability in a period of limited resources and declining enrollment should be addressed, as well as those of school business efficiency especially in facilities and transportation. Incentives for school district reorganization should be explored especially those leading towards more K-12 districts. Implementation of program oriented budgeting, more efficient data processing and computer services, and effective affirmative action programs continue to be major concerns. Many of these concerns should be addressed as part of a comprehensive departmental response to the Report of the Task Force on Business Efficiency of the Public Schools.

Since the inception of the Declining Enrollment Project in the fall of 1977, the Office of Research and Development has adopted a set of research and technical assistance goals and objectives to be addressed according to felicitous timelines. I am very pleased with the perceptiveness and sensitivity exhibited by the project staff in developing their analyses.

Readers of this anthology will learn, as we have learned, that the needs of local districts in coping with fluctuating enrollments are multi-faceted and will require thorough and insightful managerial skills coupled with communication and cooperation from all sectors of the educational community. The background and analytic data contained in this publication provide information upon which we can build a foundation for improving our effectiveness and efficiency in solving enrollment-related problems.

Sincerely,

Fred G. Burke

Fred G. Burke
Commissioner

PREFACE

This is the first publication in a series of reports focusing on the unique educational needs created by enrollment fluctuations. Since the Declining Enrollment Project was initiated during fall, 1977, this anthology forms a benchmark for looking at our status as we progress through the "era of declining numbers."

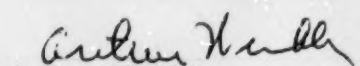
The phenomenon of fluctuating enrollment has confronted educators with the perennial problems of budgeting, staffing, allocating facility space and materials for projected student grade totals. For the most part, educational administrators have geared school district operations to accommodate growth: growth in the number of students, teachers, administrators, and support staff; growth in the number of courses offered and the instructional materials available and growth in the quality and quantity of educational facilities.

However, growth may not last forever and, indeed, an overall enrollment decline is being experienced by a majority of New Jersey school districts.

The potential for severe problems created during a period of slowdown may be heightened because our mode of thinking has been developed and geared to accommodate and adapt to growth. Therefore, we have had few opportunities to experience or prepare for zero growth or slow growth, much less negative growth or decline.

As educators, we need to hone our planning skills to meet the challenges of, and adapt to, decline. Presently, a strong case may be made for the idea that decline is harder to plan for and adjust to than growth. For example: In the past, if a school district over-capitalized its staff, facilities and/or curriculum, there was no major problem because enrollment growth during the next year or two would provide a solution. In a period of decline this is no longer the case and, in fact, time only serves to intensify and exacerbate mistakes.

During the next several months, the Office of Research and Development will be disseminating several research products aimed at providing technical assistance on enrollment-related issues to the local districts. In order to improve continually our technical assistance capabilities, we would appreciate any comments and/or recommendations that you feel will enhance the quality of our efforts in this area.



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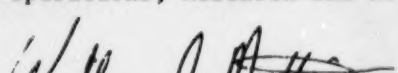

William J. Mathis
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Operations, Research and Evaluation

D E D I C A T I O N

On behalf of the New Jersey Department of Education, I would like to dedicate this publication to our esteemed colleague, the late Dr. Robert E. Weber.

Bob Weber initiated the Department's activities in the study of fluctuating enrollment and solely directed the research endeavors which culminated in the development of the Declining Enrollment Project.

Bob was truly a "man for all seasons:" a teacher and a learner whose interests and areas of expertise were boundless. As a prolific educational writer and researcher, Bob's efforts focused on many of the paramount educational issues of the day. Perhaps Bob's finest attribute was his unique ability to approach the field of education from a broad, futures-oriented perspective which helped to open our minds and expand our horizons beyond conventional modes of thinking.

State and national educators, former New Jersey commissioners of education, and myself often sought Bob's perceptive input and counsel when we were faced with important policy and decision-making responsibilities. Bob is sorely missed by all his friends and colleagues. The students and educators of New Jersey and the nation have lost one of their most prodigious proponents of educational enlightenment.

In recognition of his tremendous contributions to the field of education, we proudly dedicate this publication to Dr. Robert E. Weber.

Dr. Fred G. Burke
Commissioner of Education

August 25, 1978

AN OVERVIEW OF DECLINING ENROLLMENTS IN NEW JERSEY

SCOPE OF THE PROBLEM

The dynamics of population change have had a widespread impact on many facets of American Society, particularly on the public schools. A fluctuating birthrate produces enrollment variations which are first felt in elementary and secondary schools, then in post-secondary institutions and, ultimately, in the available labor force itself. In an "era of decline," as a diminished population cohort moves through its life cycle, many institutions are affected but none more directly than the schools. The decreasing birthrate of the Seventies has resulted in declining school enrollments, and educational administrators have found themselves in the vanguard of those who must now plan, adjust and implement policies focused on the management of resources in an era of decline.

The history of education in America up to this time, and with relatively minor exception, has been characterized by constant expansion. Administrators in a growth-oriented society have had to become adept at providing additional space, finding supplementary monies, recruiting needed personnel and mastering the intricacies of budgeting for growth. Furthermore, they have had to perform this budget balancing against the background of public clamor for better instruction, greater accountability, an improved and wider scope of curricular offerings, more individualized programs, more equality of opportunity, increased diagnosis and treatment of students with special needs, and, of course, greater student achievement. However, recent enrollment trends have necessitated a change in the requisite skills and orientation of educational administrators who will be responsible for providing a quality service with diminished resources.

There are four areas which are severely affected, both directly and indirectly, by declining school enrollment: finance, personnel, facilities and related management issues. The following sections discuss the specific causes of hardship in the four areas, as well as some suggested methods of addressing these problems.

FINANCE

The basic problems associated with the financial dimension of declining enrollments are:

- A loss of revenues.
- The continuation of fixed costs (capital outlays, debt service, maintenance) spread out over fewer students.
- Costs of an older staff (i.e., at higher salary levels due to the "last hired, first fired" mode of operation).
- Inflation and other fluctuating economic factors.
- Lack of expertise in budgeting for decline.

- Calculating expenses in the disposition of facilities affected by declining enrollment.
- Dealing with personnel "surplus" problems economically and, at the same time, humanely.
- Changes in equalized valuation and taxation patterns.
- Controlling escalating costs across the board.

The entire area of school finance and the effects of declining enrollment is exceedingly complex and is being addressed in detail elsewhere. It can be said, however, that given fixed costs, higher residual salary levels and inflation, costs actually rise, at least initially, during enrollment decline. The experiences of other states which have already had to deal with the problems associated with enrollment decline point up one common concern -- most districts need a two or three year lag period to cushion the negative financial impact resulting from revenue lost through reduced state per pupil aid.

Beyond having the State devise an equalization formula which directly responds to enrollment decline, local school and district administrators also have the responsibility of cutting costs. This responsibility involves reductions in force (RIFing), and the sale or leasing of unused facilities.

It has been estimated that cost-cutting techniques can offset declining revenues by as much as 40 per cent.[1] However, given the past and current performance of our economy, a great deal of administrative skill will be required in order to effectuate real savings. LEA administrators in large cities and rural areas will be especially hard pressed by enrollment decline. The financial implications of declining enrollment will only add to the problems of antiquated school facilities, "municipal overburden," and intra-district student migration which already plague New Jersey cities. For rural communities with older facilities and shrinking enrollments, the feasibility of the continued existence of a school district may become questionable. Such areas may be forced into consolidation or sending/receiving relationships to ease their financial woes.

The LEA administrator must also deal with a number of external factors over which he/she has little control. In New Jersey, since 1970, fuel costs have escalated by more than 150 per cent. Also, insurance costs to local school districts have risen dramatically. Add to this spiraling costs for other fixed maintenence and support areas and it is easy to see that decreasing enrollment may not, in effect, result in lower costs.

We can conclude that fiscal managers in LEAs affected by declining enrollments will be sorely tried between now and 1985, and perhaps beyond. Initially, as fixed costs, staff salaries and per pupil expenditures continue to escalate in declining enrollment districts, the most important commodity to LEA administrators will be time, rather than capital. The time it takes school administrators to recognize the problems and potential problems created by declining enrollment, the time it takes to develop alternative solutions, and the time it

takes to implement courses of action in response to decline will, to a great extent, ultimately dictate the fortunes and misfortunes of the educational arena during the next twenty years.

PERSONNEL

The basic problems in the personnel area are:

- How to keep from inhumanely terminating large numbers of teachers (many of whom have several years invested in the system) and still operate efficiently?
- How, under the "last hired, first fired" philosophy, can LEAs meet certain Federal and State mandates (ESL instructors, Title IX, etc.)?
- How can administrators, also in light of "last hired, first fired," maintain a requisite staff balance between maturity and youthfulness?
- How can administrators optimize the quality of a "mature" staff, many of whom are now far removed from their years of preparation?
- How can administrators deal with the legal aspects of force reduction?

As a local district progresses through its declining enrollment period, staff reduction will be an inevitable consequence. Some New Jersey school district enrollments have declined to the point that tenured teachers with several years of experience are being RIFed under the "last hired, first fired" format. A possible profile of staff composition in a district that has experienced sharp decline may reveal an older staff with strong credentials that has little chance of vertical mobility. At the present time, under the "last hired, first fired" format, many of the inroads paved by affirmative action toward equality in the educational work force could be eroded and some wholly lost.

Some states have approached the problem of staff reduction by developing checklists to be used by school administrators in coping with enrollment decline. The New York State checklist presented below provides a decision-making aid with regard to personnel.

1. What is the prediction on future pupil numbers?
2. Can the reliability of these projections be upheld convincingly in the public arena?
3. What impact do reduced pupil numbers have on the offerings of the current educational program?
4. Is the makeup of the student body changing?
5. Will the tasks and makeup of the instructional program change in the next three to five years?
6. Will the current organizational plan change (k-5, 6-8, 9-12, etc.)?

7. What future staffing ratios does the district wish to maintain?
8. How do these staffing ratios compare with similar state data?
9. How many staff will be needed to meet district objectives in the next three to five years?
10. What are the necessary teacher competencies and certification needs in the next three to five years?
11. In which tenure areas will positions be abolished?
12. How much of the staff reduction can be assimilated by attrition?
13. Must some of the remaining staff be retrained?
14. How does the district maintain a balance in experience, age and competence in the staff?
15. How can new programs, such as bilingual instruction, with recently employed staff be maintained in light of the last hired, first fired ruling?
16. How are these interrelated questions to be reconciled with the mandated collective negotiation legislation, rulings and precedures?[2]

While this checklist is useful, it still does not provide criteria for staff reduction nor does it identify the options in staff reduction.

Three options are most apparent when considering the response of the schools to declining enrollment: (1) contraction of services, (2) program expansion, and (3) serving new clients. If a school system contracts, personnel layoffs are unavoidable. Similarly, if public support is not forthcoming for program expansion and/or serving new clients, force reduction is also unavoidable.

For some administrators, enrollment decline offers an opportunity to improve staff quality by removing non-certificated staff from positions in which certificated staff should be used (see Table 1). Attrition is another strategy which will help to cushion the impact of force reduction (see Table 2). Furthermore, other states and districts have experimented with techniques such as staff job sharing,[3] early retirement,[4] and extended leaves of absence and sabbaticals for advanced degrees.[5]

New Jersey has experienced a decline in the number of classroom teachers in the past two years (see Table 3) and based on an analysis of force reductions in other states, New Jersey student enrollment projections, and New Jersey pupil/teacher ratios (see Table 4) it is estimated that before elementary and secondary enrollment declines bottom out, New Jersey may lose 20,000 or more teaching positions.

TABLE 1

FULL-TIME STAFF EMPLOYED IN THE PUBLIC SCHOOLS OF NEW JERSEY BY COUNTY AND MAJOR ASSIGNMENT CATEGORY SEPTEMBER 30, 1976

COUNTY	CERTIFICATED STAFF				PERCENT OF TOTAL CERTIFICATED STAFF
	ADMINISTRATORS AND SUPERVISORS	CLASSROOM TEACHERS	SPECIAL SERVICES	TOTAL	
(1)	(2)	(3)	(4)	(5)	(6)
Atlantic	201	1,954	240	2,395	2.0
Bergen	803	8,957	1,167	10,927	11.0
Burlington	338	4,304	479	5,121	5.0
Camden	484	5,209	615	6,308	7.0
Cape May	61	758	99	918	1.0
Cumberland	115	1,546	180	1,841	2.0
Essex	876	8,936	1,405	11,217	12.0
Gloucester	161	2,261	250	2,672	3.0
Hudson	371	4,650	491	5,512	6.0
Hunterdon	95	1,130	146	1,371	1.0
Mercer	292	2,939	464	3,695	4.0
Middlesex	613	6,684	885	8,182	9.0
Monmouth	500	5,971	722	7,193	8.0
Morris	453	5,023	701	6,177	6.0
Ocean	237	3,181	380	3,798	4.0
Passaic	386	4,280	508	5,174	5.0
Salem	82	841	116	1,039	1.0
Somerset	227	2,604	356	3,187	3.0
Sussex	119	1,402	173	1,694	2.0
Union	454	5,102	696	6,252	7.0
Warren	64	969	110	1,143	1.0
TOTAL	6,932	78,701	10,183	95,816	100.0
PERCENT	7.2	82.2	10.6		

NEW JERSEY STATE DEPARTMENT OF EDUCATION/OMI

TABLE 2

CERTIFICATED PERSONNEL ENTERING AND LEAVING NEW JERSEY PUBLIC SCHOOLS BY COUNTY AND POSITION

COUNTY	ADMINISTRATORS & SUPERVISORS		CLASSROOM TEACHERS		SPECIAL SERVICES		TOTAL	
	ENTERING	LEAVING	ENTERING	LEAVING	ENTERING	LEAVING	ENTERING	LEAVING
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Atlantic	14	24	330	291	54	41	398	356
Bergen	66	82	898	1,066	137	165	1,101	1,313
Burlington	38	48	691	688	62	57	791	793
Camden	47	33	766	718	136	114	949	865
Cape May	11	10	140	109	22	15	173	134
Cumberland	23	11	325	268	53	43	401	322
Essex	90	101	994	1,245	121	164	1,205	1,510
Gloucester	20	20	418	307	41	31	479	358
Hudson	54	77	665	633	81	117	800	827
Hunterdon	11	11	194	167	34	26	239	204
Mercer	55	49	493	486	106	75	654	610
Middlesex	72	64	775	816	113	100	960	980
Monmouth	50	58	787	800	111	98	948	956
Morris	38	47	589	634	96	57	723	738
Ocean	14	12	400	327	61	41	475	380
Passaic	28	39	537	564	42	58	607	661
Salem	12	7	154	124	37	20	203	151
Somerset	17	26	415	466	68	58	500	550
Sussex	15	11	171	144	27	24	213	179
Union	48	51	664	829	95	132	807	1,012
Warren	7	7	124	111	19	13	150	131
TOTAL	730	788	10,530	10,793	1,516	1,449	12,776	13,030

TABLE 3

NUMBER OF CLASSROOM TEACHERS
NEW JERSEY PUBLIC SCHOOL DISTRICTS
BY COUNTIES
1967-68 TO 1976-77

COUNTY	1967-1968	1968-1969	1969-1970	1970-1971	1971-1972	1972-1973	1973-1974	1974-1975	1975-1976	1976-1977
Atlantic	1,356	1,384	1,423	1,595	1,678	1,712	1,845	1,919	1,926	1,954
Bergen	8,045	8,308	8,619	9,022	9,398	9,473	9,507	9,425	9,253	8,957
Burlington	2,893	3,135	3,325	3,680	3,918	4,034	4,164	4,292	4,365	4,304
Camden	3,886	3,902	4,199	4,545	4,783	4,850	5,019	5,147	5,266	5,209
Cape May	429	456	480	514	584	612	636	684	730	758
Cumberland	1,108	1,117	1,190	1,261	1,340	1,403	1,449	1,499	1,572	1,546
Essex	7,673	7,921	7,999	8,611	9,248	9,278	9,567	9,570	9,288	8,936
Gloucester	1,712	1,827	1,884	1,995	2,109	2,159	2,188	2,279	2,269	2,261
Hudson	3,588	3,612	3,714	4,142	4,300	4,452	4,504	4,656	4,603	4,650
Hunterdon	731	775	832	898	962	991	1,028	1,083	1,111	1,130
Mercer	2,563	2,550	2,669	2,730	2,868	2,884	2,911	2,961	3,002	2,939
Middlesex	5,439	5,666	6,002	6,386	6,683	6,742	6,820	6,943	6,850	6,684
Monmouth	4,336	4,644	4,854	5,363	5,632	5,790	5,910	6,047	5,976	5,971
Morris	3,910	4,169	4,491	4,717	5,026	5,097	5,215	5,183	5,128	5,023
Ocean	1,787	1,889	2,124	2,306	2,609	2,749	2,909	3,042	3,112	3,181
Passaic	3,490	3,640	3,814	4,006	4,269	4,335	4,335	4,359	4,360	4,280
Salem	697	709	713	742	789	778	797	818	808	841
Somerset	2,115	2,161	2,343	2,514	2,682	2,737	2,771	2,780	2,723	2,604
Sussex	739	817	906	1,004	1,107	1,167	1,222	1,319	1,395	1,402
Union	4,826	5,038	5,152	5,223	5,407	5,424	5,460	5,494	5,316	5,102
Warren	702	736	768	813	868	894	923	948	957	969
Total	62,025	64,456	67,501	72,067	76,260	77,561	79,180	80,448	80,010	78,701

NEW JERSEY DEPARTMENT OF EDUCATION/OFFICE OF
MANAGEMENT INFORMATION

Table 4

Student - Staff Ratios

Year	Ratio
1961	22.32
1962	22.17
1963	22.03
1964	21.83
1965	21.46
1966	21.09
1967	20.45
1968	20.08
1969	19.57
1970	19.05
1971	18.55
1972	18.15
1973	17.64
1974	17.21
1975	16.75
1976	16.64

*Source: "Basic Statistical Data, Bulletin A77-1, NJEA, June 1977.

FACILITIES

If enrollments decline far enough, one inevitable consequence is empty classrooms and/or empty buildings. The basic problems in the facilities area are:

- Devising workable alternatives for classrooms or buildings uses.
- The disposition of facilities (criteria, options, procedures) with regard to short- and long-term impacts.
- The politics and public relations of closing neighborhood schools (savings vs. community sentiment).

If a school district decides upon contraction, surplus facilities need to be disposed of efficiently. However, future enrollment projections and community needs should be anticipated and planned for before any facilities are closed, sold, or committed to other uses. Nationally, schools which have gone through the process of surplus space disposition have created resource rooms, instructional rooms for new course offerings, additional science laboratories, in-district vocational areas, library media centers, foreign language labs, student and faculty lounges, additional special education programs, needed storage areas, added administrative space, etc.

Schools deciding to serve new clientele rather than close facilities have opted for programs such as the following: daytime adult education; full-day kindergarten, nursery and preschool classes; community centers; senior citizen centers (including nutrition and health programs); neighborhood libraries; etc.

Once a decision has been reached to dispose of a facility (again, keeping in mind possible future needs), perhaps the most desirable option is to offer the surplus facility for lease or rent for alternative uses. Here again, thought must be given to many factors, such as the physical structure of the building, zoning laws, etc. Moreover, prevailing opinion is that alternative use should be as close as possible to normal school use (e.g., leasing to community colleges or universities). Some districts report satisfaction in leasing to community agencies, to municipalities for offices, to recreation departments, theater groups, and public libraries. Given the waiting list for vocational education slots (in New Jersey in 1976-77 the waiting list consisted of 14,000 people[6]), districts might do well to consider leasing to counties for area vocational schools. Districts contemplating reorganization and/or consolidation could also share facilities. In addition, growth districts adjacent to a declining district might consider acquiring facilities in the latter rather than embarking on a new building program.

Still other alternative use possibilities are: nursing homes, low-cost housing, ambulatory hospitals, community clinics, experimental or alternative schools, Montessori schools, private day schools for the handicapped, teacher centers and, in New Jersey, Education Improvement

Centers. Leases and rental agreements should, where possible, contain a cancellation clause allowing for future reoccupation by LEAs in the event of an enrollment increase.

The decision to sell a building, particularly if future enrollments are uncertain, should only be made after careful consideration. Before the sale, zoning laws should be checked as well as possible restrictions on the use of income derived from the sale.

Mothballing a building should be a last-resort action for two reasons: natural deterioration and vandalism. Some districts have found that in the long run it is cheaper to put a skeleton crew or administrative offices in an unused facility than to mothball it.

For local districts with increasing enrollment and/or outdated facilities that are contemplating new building programs, a greater emphasis should be put upon mobile units and modular/relocatable units.[7] Also, greater emphasis should be placed on the concept of sharing facilities between districts in an effort to utilize fully educational space and potentially reduce costs.

ADDITIONAL MANAGEMENT CONSIDERATIONS

Most administrators are inclined to see declining enrollment as "bad" and as creating difficult problems. However, none of the problems created by declining enrollments will be unmanagable. In fact, the era of decline may provide many administrators with the opportunity to improve conditions in their districts. Improvements can be made in the following areas: eliminating double sessions and general overcrowding (see Table 5); cutting back on incompetent and ineffective staff; reducing the number of uncertificated personnel now holding positions in which certificated personnel belong; getting rid of obsolete and unsafe facilities; and implementing more efficient reorganization strategies within a district, within a county, and within a region crossing county lines. Declining enrollments can also provide opportunities for new planning and program innovations, such as community education conducting in-service efforts which are more intensive and of higher quality and doing needed facility repairing, remodeling, and renovating (see Table 6). There is much that can be done in this new era if administrators see and appreciate the possibilities.

New and stronger management capacities need to be developed to cope better with negative growth, but much can be gained from the experiences of others in dealing with the problems of decline. The literature suggests the following new emphases for LEAs:

- Develop a comprehensive approach in planning for decline.
- Perform data-based planning, which includes collecting demographic data, plotting cohort survival, projecting enrollments, community analysis and variables in enrollment fluctuations.
- Do advanced planning for the possiblity of future enrollment increases.

TABLE 5

NUMBER OF PUPILS ON CURTAILED SESSIONS
NEW JERSEY PUBLIC SCHOOL DISTRICTS
1965-66 TO 1974-75

COUNTY	1965-1966	1966-1967	1967-1968	1968-1969	1969-1970	1970-1971	1971-1972	1972-1973	1973-1974	1974-1975
Atlantic	9	6	489	18	1,764	3,866	797	4,827	3,897	3,769
Bergen	1,449	1,928	2,019	1,507	2,300	2,161	2,464	2,285	2,621	1,094
Burlington	1,262	1,041	492	1,694	5,061	4,256	5,036	2,030	2,118	9,108
Camden	2,859	5,547	2,321	2,210	1,884	1,040	2,076	1,204	607	474
Cape May		500				296	483	281	28	
Cumberland	751	329	451	12	1,730	1,616	1,682	2,678	2,641	4,896
Essex	428	3,336	2,851	1,686	1,585	1,049	1,853	1,220	2,018	458
Gloucester	2,069	3,149	1,862	1,754	1,837	5,153	105	3,466	2,045	5,724
Hudson	1,970	2,162		799	763	2,897	5,597	2,331	2,076	1,191
Hunterdon	49	44	56		58	1	50	112	274	
Mercer	231	15	10	81	147	5	66	2,060	206	
Middlesex	514	2,593	5,731	4,898	2,354	722	2,799	3,458	3,940	1,557
Monmouth	10,674	6,991	7,077	3,567	3,515	4,922	1,009	2,327	2,571	4,835
Morris	1,386	1,136	472	844	1,747	995	760	292	178	108
Ocean	2,897	3,678	4,512	7,357	3,211	5,925	4,624	499	3,050	4,823
Passaic	39	475	970	663	629	424	1,711	1,110	59	
Salem		2	2	51	79	9		5	80	2
Somerset	1,606	250	650	298	251	55	9	101	121	44
Sussex		9		138	58	1,359	1,160	1,384	313	1,680
Union		1	409	54	23	664	127	241	71	15
Warren	255	275	2	750	28	1	113	87	164	253
Total	28,448	33,467	30,276	28,381	29,024	37,416	32,521	31,998	29,078	40,031

NEW JERSEY DEPARTMENT OF EDUCATION/OFFICE OF MANAGEMENT INFORMATION

TABLE 6

NUMBER OF PUPILS IN SUBSTANDARD CLASSROOMS
NEW JERSEY PUBLIC SCHOOL DISTRICTS
BY COUNTIES
1965-66 TO 1974-75

COUNTY	1965-1966	1966-1967	1967-1968	1968-1969	1969-1970	1970-1971	1971-1972	1972-1973	1973-1974	1974-1975
Atlantic	1,246	1,324	1,458	1,077	1,245	909	1,913	924	1,003	641
Bergen	6,707	6,238	5,054	5,153	4,139	2,967	2,221	2,322	1,474	809
Burlington	2,587	1,723	3,427	2,869	2,282	1,675	1,235	456	592	1,207
Camden	2,184	2,065	2,486	1,935	1,804	3,650	1,131	950	474	402
Cape May	113	14	70	85	130	226	124	113	6	6
Cumberland	1,280	684	832	940	738	1,116	935	673	710	226
Essex	3,088	2,049	2,052	2,249	4,469	2,292	2,120	2,289	2,209	3,003
Gloucester	3,303	2,653	2,007	1,307	1,984	1,117	1,941	609	230	203
Hudson	359			48	578	466	859	814	59	148
Hunterdon	449	82	653	443	427	391	253	227	365	259
Mercer	2,279	1,205	1,552	2,081	1,512	535	342	407	414	384
Middlesex	3,715	4,018	4,463	1,593	3,014	1,470	1,907	1,027	883	747
Monmouth	3,532	3,013	2,629	2,673	2,496	1,807	1,949	1,662	1,016	847
Morris	3,475	2,778	3,882	2,153	1,635	2,417	1,672	438	243	74
Ocean	2,454	729	1,334	2,498	1,536	2,081	944	409	563	430
Passaic	414	474	435	1,123	1,869	1,502	582	226	242	166
Salem	636	425	690	469	611	660	283	314	171	232
Somerset	2,295	2,740	1,228	1,397	1,267	1,098	1,029	610	502	349
Sussex	450	431	562	1,434	1,646	487	432	518	255	462
Union	2,491	962	2,270	3,256	2,730	4,093	2,464	1,357	2,498	1,650
Warren	1,339	1,071	842	864	1,141	719	1,231	611	726	578
Total	44,396	34,678	37,926	35,653	37,253	31,618	25,567	16,956	14,635	12,803

NEW JERSEY DEPARTMENT OF EDUCATION/OFFICE OF MANAGEMENT INFORMATION

- Develop long-range personnel plans (including policy review, legal advice, consultation with collective bargaining agents, short-term contracts for new employees, etc.).
- Review bargaining policies with regard to their adequacy in an era of decline.
- Develop management monitoring and early warning systems.
- Do histories or studies of past patterns (e.g., enrollment trends, staff attrition).
- Increase communication and frequency of contact with educators in adjacent districts, with particular regard to sharing facilities, interdistrict transfers of teachers, consolidation, sending-receiving arrangements, shared programs, professional development services,etc.
- Attempt, in each district to assess the impact of declining enrollments on "thorough and efficient," with particular attention to revenue loss and meeting "T & E" requirements.
- Delegate study groups within each district to study declining enrollments, including securing documents from other states, the Federal government, clearinghouses, associations, literature searches, preparing bibliographies, etc.

In addition to these activities, certain other aspects of schooling and its governance will have to be watched closely. Staff morale, because of reduced vertical mobility, is one area. Changes in community attitudes and support is another. Very high on the list is the problem of resegregation. Table 7 shows the change in white/minority enrollment over time in New Jersey. Given the changes shown in this Table, it is possible that the resegregation taking place may be in part, a function of enrollment declines. This will have to be studied and, where possible, corrective measures devised.

TABLE 7
COMPARISON OF PUBLIC SCHOOL ENROLLMENTS
BY COUNTY AND ETHNIC/RACIAL ORIGIN
1967-76

COUNTY	1967					1976					1967-1976		
	WHITE		MINORITY		TOTAL	WHITE		MINORITY		TOTAL	WHITE	MINORITY	TOTAL
	Enrollment	Percent	Enrollment	Percent	Enrollment	Enrollment	Percent	Enrollment	Percent	Enrollment	%Change	%Change	%Change
Atlantic	23,333	72.3	8,943	27.7	32,276	24,616	66.7	12,309	33.3	36,925	5.4	37.6	16.2
Bergen	161,433	96.3	6,171	3.7	167,604	139,445	91.8	12,495	8.2	151,940	-13.6	102.5	-9.3
Burlington	60,952	89.5	7,137	10.5	68,089	63,784	82.5	13,512	17.5	77,296	4.6	89.3	13.5
Camden	71,375	79.6	18,236	20.4	89,611	72,191	74.9	24,230	25.1	96,421	1.1	32.9	7.6
Cape May	8,741	88.2	1,173	11.8	9,914	10,922	87.4	1,568	12.6	12,490	25.0	33.7	26.0
Cumberland	20,272	74.8	6,828	25.2	27,100	20,006	64.9	10,801	35.1	30,807	-1.3	58.2	13.7
Essex	99,583	57.9	72,505	42.1	172,088	71,489	44.0	91,171	56.1	162,660	-28.2	25.7	-5.5
Gloucester	34,234	88.6	4,406	11.4	38,640	36,535	87.7	5,108	12.3	41,643	6.7	15.9	7.8
Hudson	57,894	68.1	27,102	31.9	84,996	37,956	44.2	47,982	55.8	85,938	-34.4	77.0	11.1
Hunterdon	15,837	98.8	199	1.2	16,036	19,527	98.4	317	1.6	19,844	23.3	59.3	23.7
Mercer	39,609	73.1	14,585	26.9	54,194	37,202	67.5	17,880	32.5	55,082	-6.1	22.6	1.6
Middlesex	110,684	91.9	9,794	8.1	120,478	99,559	85.8	16,510	14.2	116,069	-10.1	68.5	-3.7
Monmouth	85,034	87.8	11,827	12.2	96,861	90,544	85.0	15,955	15.0	106,499	6.5	34.9	10.0
Morris	77,527	97.1	2,347	2.9	79,874	84,948	94.8	4,669	5.2	89,617	9.6	99.0	12.2
Ocean	38,252	95.9	1,647	4.1	39,899	57,301	92.3	4,769	7.7	62,070	49.8	189.6	55.6
Passaic	63,831	77.2	18,872	22.8	82,703	53,550	63.4	30,878	36.6	84,428	-16.1	63.6	51.9
Salem	12,059	79.6	3,087	20.4	15,146	10,836	76.9	3,251	23.1	14,087	-10.1	5.3	-7.0
Somerset	43,804	95.6	2,008	4.4	45,812	40,736	92.4	3,359	7.6	44,095	-5.9	67.3	-2.7
Sussex	16,507	99.6	72	.4	16,579	24,763	98.9	277	1.1	25,040	50.0	284.7	51.0
Union	86,013	83.3	17,202	16.7	103,215	62,798	69.2	28,013	30.8	90,811	-27.0	62.8	-12.0
Warren	15,499	98.4	251	1.6	15,750	17,173	97.7	413	2.3	17,586	10.8	64.5	11.7
TOTALS	1,141,973	83.0	234,392	17.0	1,376,365	1,075,881	75.7	345,467	24.3	1,421,348	-5.8	47.4	3.3

Data Source: Office of Management Information, New Jersey State Department of Education.

CONCLUSION

Historically, many New Jersey school districts have experienced tremendous fluctuations in student enrollment but, overwhelmingly, districts have geared their operations to accommodate enrollment increases. However, as enrollment growth is no longer the case in many school systems, districts must adjust and develop administrative and instructional programs to meet changing and expanding student needs even while actual pupil numbers are shrinking.

Educational administrators can never hope to control the economic and demographic variables that produce enrollment fluctuations. However, they can attempt to understand and respond to the educational needs created by these conditions.

This paper is an initial effort aimed at assisting educators in their understanding of the issues related to declining enrollments. Specifically, the paper attempts to serve the following purposes:

(1) provide a comprehensive overview of the declining enrollment situation in New Jersey;
(2) lay out the parameters of the particular administrative areas which are most severely affected by declining enrollments; and
(3) briefly describe other states' responses to declining enrollment issues.

The resolution of the difficulties imposed by declining enrollments on school districts will ultimately result from effective planning and strong leadership at the local level reinforced by supportive and sympathetic guidance and direction from the State Department of Education, the State Board, and the Legislature.

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PATTERNS OF ENROLLMENT FLUCTUATION AND DECLINE IN NEW JERSEY SCHOOL DISTRICTS 1966-67 to 1976-77

INTRODUCTION

Total enrollment in New Jersey's public elementary and secondary school districts peaked during the 1971-72 school year. The total average resident daily enrollment that year was 1,488,262. By 1976-77 it had declined by 5.1 per cent to 1,412,704. Such a substantial loss of pupils represents a potentially serious problem for local school districts. It is important to keep in mind, however, that the loss of students has not affected all districts equally. Many districts began losing students well before the 1971-72 school year and have lost a much greater percentage of their total enrollment than the 5.1 per cent statewide. Other districts began to decline more recently and have not lost as large a percentage of their students. A third, and not insignificant, group of districts was still growing in 1976-77 and has yet to experience the pressures created by sharp enrollment declines. Any policies or programs designed to help districts cope with enrollment decline must take into account this diversity of school district experiences.

Until now the statistics available on enrollment fluctuation and decline in New Jersey have been limited to county and state totals. To remedy this situation a data file has been assembled which allows more detailed analysis of recent enrollment trends. It contains every district's "Total Average Enrollment" and its "Sub Total Current Expense" -- a measure of total district operating expenditures,[1] for the 11 school years between 1966-67 and 1976-77. In a later report this data file will be used to analyze the relationship between declining enrollments and school district costs. In conjunction with other data files, this historical file of enrollment data permits a systematic examination of recent enrollment trends.

This paper describes in detail the recent trends in New Jersey enrollment change. For every district in the state the year of peak enrollment was identified and the percentage change in total enrollment from the peak year to 1976-77 was calculated. Districts were then sorted and grouped by various descriptive characteristics: region of the state, district type, size, per pupil wealth, community type (urban, suburban, rural), and District Factor Group (a measure of the socio-economic status of the community).

STATE SUMMARY

For the state as a whole, more than half of all districts reached their peak enrollment before the 1972-73 school year: 30.2 per cent peaked during the period from 1966-67 to 1969-70; 25.9 per cent peaked in 1970-71 or 1971-72; and 27.2 per cent of districts peaked sometime during the four school years between 1972-73 and 1975-76. Unexpectedly, we found that 102 districts (16.7 per cent) were still growing in 1976-77, the last year in our data file.

Districts also experienced a wide range in the total amount of enrollment decline from the peak year through 1976-77. Just over 30 per cent of all districts lost less than 10 per cent of their peak year enrollment. Twenty-eight per cent of all districts lost between 10 and 20 percent of their peak year enrollment, while almost 25 per cent of all districts lost more than 20 per cent. When contrasted with the previous decades of enrollment growth, these substantial losses in enrollment constitute a significant problem for district managers and planners.

Districts with declining enrollment obviously do not experience all of that decline in a one or two year period. Thus, as would be expected, districts with a large total enrollment decline tend to be concentrated among those districts with earlier enrollment peaks. However, this is not uniformly so. More than 10 per cent of the districts with a peak enrollment year of 1972-73 or later have experienced enrollment declines of 15 per cent or more.

How have differently situated districts fared with this statewide pattern of decline? Is one organizational type suffering greater losses of enrollment than another? Are low wealth districts losing more pupils than high wealth districts? Are suburban, rural or urban districts suffering most from enrollment decline? In which parts of the state are enrollment declines concentrated most heavily? The answer to these questions and others will suggest the extent to which state policies for coping with enrollment decline must be tailored to the specific conditions facing particular districts. The answers to these questions will also give some preliminary indication of how enrollment decline may be affecting other policy objectives, such as the equalization of educational expenditures or the efficient management of school districts.

In the following sections the differential effect of decline on various categories of districts will be examined. The tables in the Appendix present a more detailed summary of these findings.

REGIONAL IMPACT OF ENROLLMENT DECLINE[2]

The districts in the northeastern region of the state have experienced the earliest peaks in enrollment and the greatest declines since those peaks. A full 80 per cent of the districts in the northeast peaked before 1972-73 and, as of 1976-77, only 6.7 per cent of districts in the region were still growing. More districts in the northeastern part of the state have also exhibited larger losses of enrollment.

The other three regions are more difficult to distinguish in terms of either their peak years of enrollment of their loss of pupils. Both the central and southern regions showed 21 per cent of their districts still growing as of 1976-77. The proportion of districts in the northwest still growing was slightly smaller--just over 18 per cent.

IMPACT OF ENROLLMENT DECLINE BY SCHOOL DISTRICT TYPE

Enrollment decline has had the biggest impact on the K-6 and K-8 elementary districts and the K-12 districts. Regional high schools (both 7-12 and 9-12) have experienced much less decline, while the county vocational schools have almost completely escaped its effects.

The K-8 elementary districts have experienced the earliest peak years and the greatest percentage decline. Over 68 per cent of these districts saw their enrollment peak before 1972-73 and 50 per cent of the K-8's have lost at least 20 per cent of their peak year enrollment. The K-6 and K-12 did not peak quite as early or decline quite so precipitously. It is important to keep in mind, however, that a portion of these organizational types showing the sharpest declines were still growing as of 1976-77--14 per cent of the K-6 and K-8 districts and 11 per cent of the K-12's.

The regional and vocational high schools show the least effect of enrollment decline. As of 1976-77, 42 per cent of the 7-12 regionals and 44 per cent of the 9-12 regionals were still growing. In these two categories the bulk of districts which had already peaked did so during the period from 1972-73 to 1975-76. Along with the recent peak years, these districts have also experienced relatively mild rates of decline.

County vocational schools have been least affected by decline. Thirteen of the 20 county vocational schools were still growing in 1976-77. Of the seven vocational districts with declining enrollment, five had experienced enrollment losses of less than 10 per cent.

IMPACT OF ENROLLMENT DECLINE BY SCHOOL DISTRICT SIZE

There is little apparent variation in enrollment decline when districts are categorized by relative size. Districts in the moderate size ranges (from 2,500 to 5,000 and from 5,000 to 10,000 enrollment) on the average appear to have peaked a little earlier and to have had somewhat larger declines than either small or large districts. But the overall differences among districts in the various size categories do not appear to be significant.

IMPACT OF ENROLLMENT DECLINE BY DISTRICT WEALTH

There appears to be little difference in enrollment decline among districts when classified by district wealth (as measured by 1975-76 equalized valuation per pupil). Low wealth districts (with equalized valuation of less than $40,000 per pupil) and moderately high wealth districts (with equalized valuation in the range of $80,000 to $130,000 per pupil) had a somewhat higher proportion of districts peaking before 1970-71. However, these categories of districts do not appear to have lost more pupils than the others. Although the relationship between wealth and enrollment

decline deserves further attention, these preliminary findings suggest that students are not leaving low wealth districts more rapidly than other districts.

IMPACT OF ENROLLMENT DECLINE BY SOCIO-ECONOMIC STATUS

District Factor Grouping (DFG) is a measure of community socio-economic status (SES) based on 1970 U.S. Census data. There appears to be a little difference in enrollment decline when districts are categorized and grouped by SES. The high SES category shows a slightly higher per cent of districts with early peak years (prior to 1970-71) and also a slightly higher percentage of districts with large percentage drops in enrollment since their peak years (66.8 per cent of districts declined by 15 per cent or more since their peak year).

IMPACT OF ENROLLMENT DECLINE BY COMMUNITY TYPE

Urban school districts exhibited the greatest frequency of early enrollment peaks. Over 81 per cent of these districts peaked before 1972-73, in contrast to only 56 per cent of the suburban districts and 45 per cent of the rural districts. Urban districts also exhibited higher percentage declines from their peak year to 1976-77. The rural and regional district categories (which could not be classified as either suburban or rural) showed the largest percentage of districts still growing, as of 1976-77.

The definition of "urban", as used in the community type categorization, is a broad and inclusive definition that encompasses more than 150 districts. A more conventional definition of urban includes only school districts in the 28 Urban Aid communities. The majority of these urban districts peaked during the 1970-71 and 1971-72 school years and have, for the most part, witnessed enrollment declines in the range of two to 15 per cent.

INTERACTION AMONG CATEGORIES

This analysis has described the incidence of enrollment decline across school districts categorized in several different ways--region, type, wealth, size, DFG and community type. In some cases, apparently significant variations in decline have taken place--especially when the districts were sorted by region, organizational type and community type. We have not yet had time to examine many of the various possible interactions among variables. For example, although size and wealth did not appear to be closely related to enrollment decline, if size and wealth were considered <u>together</u> they might have an impact on peak years, or on the percentage declines since the year of peak enrollment. For example, large, poor districts might exhibit a different pattern of decline from small, wealthy districts. Such a multivariate examination of decline must

await further analysis.

SUMMARY AND CONCLUSIONS

This overview of recent enrollment trends in New Jersey allows several important generalizations and conclusions:

- After peaking in 1971-72, state enrollment declined by 75,558 or 5.1 per cent through 1976-77.
- Declines are unevenly distributed across districts. On the one hand, almost 25 per cent of the school districts in the state have lost 20 per cent or more of their peak year enrollments. On the other hand, almost 17 per cent of all districts were still growing in 1976-77.
- Enrollment decline has been felt most strongly in the northeastern part of the state, although no part of the state has been exempt from its effects. The southern and central regions had the largest per cent of their districts still growing as of 1976-77 (21 per cent).
- The K-6 and K-12 districts have all witnessed substantial losses in enrollment. Regional high schools (both 7-12 and 9-12 districts) have been much less adversely affected. We can expect, however, that they will be the next to feel the pinch, as the smaller student cohorts move up through the grades. County vocational school districts have so far been least affected by enrollment decline.
- Urban school districts peaked somewhat earlier and have witnessed somewhat larger declines than either suburban or rural districts. However, the differences among urban, suburban and rural districts are not great.
- There was little difference among districts in terms of either their peak years or their percentage declines since peak year, when sorted by wealth, size or socio-economic status.

Clearly, enrollment decline has hit some areas of the state and types of districts more severely than others. Such differential effects are likely to continue. Although we have not developed forecasts to test our expectations, it seems likely that many of the K-6 and K-8 districts, which have witnessed sharp declines, are likely to stabilize for several years with their smaller cohorts. Many K-12 districts will continue to lose students as decline reaches into their secondary grades. Some of the 7-12 and 9-12 regionals will also begin to lose more students as the smaller cohorts reach them. Whatever policies or programs are adopted to assist districts in dealing with decline should not only

assist districts which have already faced decline, but also those which are just now beginning to confront it. Clear, too, is the need to make use of the experience acquired by districts which have already coped with the problems of decline.

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The Northeast includes Bergen, Essex, Hudson and Union counties. The Northwest includes Hunterdon, Morris Passaic, Somerset, Sussex, and Warren counties. The Central region includes Burlington, Middlesex, Monmouth, Mercer, and Ocean counties. The Southern region includes Camden, Atlantic, Cape May, Gloucester, Cumberland and Salem counties.

APPENDIX TABLES

YEAR OF PEAK ENROLLMENT

PERCENT ENROLLMENT DECLINE SINCE PEAK YEAR

with districts sorted by:

--EIC Region (Table 2.a and 2.b)

--District Type (Table 3.a and 3.b)

--Size (Table 4.a and 4.b)

--Wealth (Table 5.a and 5.b)

--Socio-Economic Status (DFG)
(Table 6.a and 6.b)

--Community Type (Table 7.a and 7.b)

--Urban Aid Designation (Table 8.a and 8.b)

Table 1.a

	PERCENTAGE OF DISTRICTS WITH PEAK YEAR OF			
	1966-67 to 1969-70	1970-71 to 1971-72	1972-73 to 1975-76	1976-77
STATE TOTALS	30.2%	25.9%	27.2%	16.7%

Table 1.b.

	PERCENT OF DISTRICTS WITH AN ENROLLMENT DECLINE FROM ITS PEAK YEAR TO THE PRESENT OF							
	0	>0 <2%	=>2 <5%	=>5 <10%	=>10 <15%	=>15 <20%	=>20 <30%	=>30%
STATE TOTALS	16.9	7.3	9.8	13.2	16.9	11.1	13.5	11.4

TABLES 2.a, 2.b. Districts Categorized by EIC Region

Table 2.a.

REGION		PERCENTAGE OF DISTRICTS WITH PEAK YEAR OF			
		1966-67 to 1969-70	1970-71 to 1971-72	1972-73 to 1975-76	1976-77
NE	(134)	40.3	39.6	13.4	6.7
NW	(159)	25.3	15.2	41.1	18.4
Central	(159)	26.4	26.4	26.4	20.8
South	(139)	26.1	24.6	28.3	21.0

Table 2.b

REGION		PERCENT OF DISTRICTS WITH AN ENROLLMENT DECLINE FROM ITS PEAK YEAR TO THE PRESENT OF							
		0	>0 <2%	=>2 <5%	=>5 <10%	=>10 <15%	=>15 <20%	=>20 <30%	=>30%
NE	(134)	6.7	3.7	9.0	13.4	20.2	17.2	21.6	8.2
NW	(159)	18.9	10.1	8.2	12.6	18.2	8.8	9.4	13.8
Central	(159)	20.8	6.3	12.0	16.4	15.1	11.3	9.4	8.8
South	(139)	21.6	8.6	11.5	11.5	17.3	9.4	14.4	5.8

Tables 3.a, 3.b. Districts Categorized by Organizational Type

Table 3.a.

DISTRICT TYPE	PERCENTAGE OF DISTRICTS WITH PEAK YEAR OF			
	1966-67 to 1969-70	1970-71 to 1971-72	1972-73 to 1975-76	1976-77
1. K-6 (131)	32.8	23.7	29.8	13.7
2. K-8 (57)	45.6	22.8	17.5	14.0
3. K-12 (345)	31.9	31.0	25.8	11.3
4. 7-12 (31)	.0	9.7	48.4	41.9
5. 9-12 (16)	.0	18.8	37.5	43.8
6. Co. Voc. (20)	5.0	.0	30.0	65.0

Table 3.b.

DISTRICT TYPE	PERCENT OF DISTRICTS WITH AN ENROLLMENT DECLINE FROM ITS PEAK YEAR TO THE PRESENT OF							
	0	>0 <2%	=>2 <5%	=>5 <10%	=>10 <15%	=>15 <20%	=>20 <30%	=>30%
1. K-6 (131)	14.5	4.6	6.9	16.8	14.5	6.9	19.9	16.0
2. K-8 (57)	14.0	3.5	1.8	3.5	15.8	10.5	24.6	26.3
3. K-12 (345)	11.6	7.5	11.3	15.0	20.8	14.2	12.4	7.2
4. 7-12 (31)	40.6	12.5	21.9	6.3	9.4	6.3	.0	3.1
5. 9-12 (16)	43.8	18.8	18.8	6.3	.0	12.5	.0	.0
6. Co. Voc. (20)	65.0	15.0	5.0	5.0	5.0	.0	.0	.0

Tables 4.a, 4.b. Districts categorized by size

Table 4.a.

SIZE	PERCENTAGE OF DISTRICTS WITH PEAK YEAR OF			
	1966-67 to 1969-70	1970-71 to 1971-72	1972-73 to 1975-76	1976-77
0-499 (167)	27.0	20.4	31.2	21.7
500-499 (121)	24.8	24.0	33.1	18.2
1,000-2,499 (163)	28.2	28.2	27.6	16.0
2,500-4,999 (91)	39.6	26.4	20.9	13.2
5,000-9,999 (52)	44.1	36.5	13.5	5.8
10,000-19,999 (11)	27.3	36.4	18.2	18.2
20,000- or more (5)	20.0	40.0	20.0	20.0

Table 4.b.

SIZE*	PERCENT OF DISTRICTS WITH AN ENROLLMENT DECLINE FROM ITS PEAK YEAR TO THE PRESENT OF							
	0	>0 <2%	=>2 <5%	=>5 <10%	=>10 <15%	=>15 <20%	=>20 <30%	=>30%
0-499 (167)	22.0	8.7	6.4	8.7	11.6	9.9	14.0	18.6
500-999 (121)	18.2	7.4	10.7	19.8	18.2	8.3	9.1	8.3
1,000-2,499 (163)	16.0	7.4	14.1	9.2	16.6	9.8	15.3	11.7
2,500-5,000 (91)	13.2	7.7	5.5	13.2	20.9	14.3	16.5	8.8
5,000-9,999 (52)	5.8	3.9	9.6	19.2	25.0	19.2	15.4	1.9
10,000-19,999 (11)	18.2	.0	18.2	27.3	27.3	9.1	.0	.0
20,000 or more (5)	20.0	.0	20.0	40.0	.0	20.0	.0	.0

*Categorized based on 1966-67 enrollment

Tables 5.a., 5.b. Districts categorized by wealth

Table 5.a.

WEALTH CATEGORY*	PERCENTAGE OF DISTRICTS WITH PEAK YEAR OF			
	1966-67 to 1969-70	1970-71 to 1971-72	1972-73 to 1975-76	1976-77
Less than $40,000 (83)	38.5	25.6	18.0	18.0
$40,000 to 49,999 (60)	25.3	33.3	30.0	18.3
$50,000 to 59,999 (102)	21.6	24.5	35.8	17.7
$60,000 to 69,999 (79)	29.1	24.1	20.3	19.0
$70,000 to 79,999 (79)	31.6	20.3	30.4	17.7
$80,000 to 99,999 (90)	38.9	23.3	24.5	13.3
$100,000 to 129,999 (63)	38.1	22.2	22.2	17.5
$130,000 and above (59)	23.7	39.0	25.4	11.9

Table 5.b.

WEALTH CATEGORY*	PERCENT OF DISTRICTS WITH AN ENROLLMENT DECLINE FROM ITS PEAK YEAR TO THE PRESENT OF							
	0	>0 <2%	=>2 <5%	=>5 <10%	=>10 <15%	=>15 <20%	=>20 <30%	=>30%
Less than $40,000 (83)	18.1	3.6	10.8	14.5	16.9	6.0	12.1	18.1
$40,000 to 49,999 (60)	18.3	15.0	15.0	10.0	13.3	11.7	11.7	5.0
$50,000 to 59,999 (102)	17.7	13.7	9.8	13.7	10.8	10.8	14.7	8.8
$60,000 to 69,999 (79)	19.0	7.6	6.3	16.5	20.3	11.4	10.1	8.9
$70,000 to 79,999 (79)	19.0	7.6	6.3	16.5	15.2	13.9	12.7	8.9
$80,000 to 99,999 (90)	13.3	5.6	8.9	8.9	25.6	12.2	17.8	7.8
100,000 to 129,999 (63)	17.4	.0	12.7	15.9	17.5	7.9	19.1	9.5
130,00 and above (59)	11.9	3.4	10.2	8.5	15.3	15.3	8.5	27.1

*Equalized Valuation Per pupil, 1975.76.

Tables 6.a. and 6.b. Districts categorized by Socio-Economic Status (DFG)

Table 6.a.

SOCIO-ECONOMIC STATUS (DFG)		PERCENTAGE OF DISTRICTS WITH PEAK YEAR OF			
		1966-67 to 1969-70	1970-71 to 1971-72	1972-73 to 1975-76	1976-77
Low (a)	(52)	30.8	21.2	25.0	23.1
Low-Moderate (b,c,d)	(145)	31.7	29.0	26.2	13.8
High-Moderate (e,f,g)	(145)	27.6	29.7	25.5	12.4
High (h,i,j)	(148)	35.1	27.0	31.1	6.9
Small Districts (z)	(75)	22.9	23.0	32.4	21.6

Table 6.b.

SOCIO-ECONOMIC STATUS (DFG)		PERCENT OF DISTRICTS WITH AN ENROLLMENT DECLINE FROM ITS PEAK YEAR TO THE PRESENT OF							
		0	>0 <2%	=>2 <5%	=>5 <10%	=>10 <15%	=>15 <20%	=>20 <30%	=>30%
Low (a)	(52)	23.1	9.6	21.2	17.3	11.5	11.5	3.9	1.9
Low-Moderate (b,c,d)	(145)	13.8	7.6	11.0	17.2	17.2	8.3	13.8	6.2
High-Moderate (e,f,g)	(145)	17.9	6.9	9.0	11.0	21.4	12.4	12.4	9.0
High (h,i,j)	(148)	6.8	3.4	7.4	15.5	21.6	15.5	18.2	11.5
Small Districts (z)	(75)	22.7	12.0	10.7	6.7	8.0	12.0	14.7	13.3

Tables 7.a., 7.b. Districts categorized by Community Type

Table 7.a.

COMMUNITY TYPE		PERCENTAGE OF DISTRICTS WITH PEAK YEAR OF			
		1966-67 to 1969-70	1970-71 to 1971-72	1972-73 to 1975-76	1976-77
Urban (1,2)	(154)	39.6	41.6	15.6	3.2
Suburban (4,5)	(206)	26.7	29.6	31.6	11.2
Rural (6,7,8)	(156)	33.3	12.2	30.1	24.4
Regional (0)	(49)	2.1	18.8	43.8	35.4

Table 7.b.

COMMUNITY TYPE	PERCENT OF DISTRICTS WITH AN ENROLLMENT DECLINE FROM ITS PEAK YEAR TO THE PRESENT OF							
	0	>0 <2%	=>2 <5%	=>5 <10%	=>10 <15%	=>15 <20%	=>20 <30%	=>30%
Urban	3.2	3.9	11.7	16.2	24.7	13.6	18.8	7.8
Suburban	11.2	7.3	9.7	14.6	18.0	14.6	16.0	8.7
Rural	25.6	7.1	7.7	12.8	14.1	7.7	10.9	14.1
Regional	34.7	16.3	18.4	6.1	12.2	10.2	.0	2.0

Tables 8.a., 8.b. Districts categorized by Urban Aid Designation

Table 8.a.

URBAN AID CATEGORIZATION	PERCENTAGE OF DISTRICTS WITH PEAK YEAR OF			
	1966-67 to 1969-70	1970-71 to 1971-72	1972-73 to 1975-76	1976-77
Urban Aid (28)	17.9	57.1	14.3	10.7
Non-Urban Aid (575)	30.5	24.8	28.1	16.6

Table 8.b.

URBAN AID CATEGORIZATION	PERCENT OF DISTRICTS WITH AN ENROLLMENT DECLINE FROM ITS PEAK YEAR TO THE PRESENT OF							
	0	>0 <2%	=>2 <5%	=>5 <10%	=>10 <15%	=>15 <20%	=>20 <30%	=>30%
Urban Aid (28)	10.7	14.3	25.0	28.6	10.7	3.6	7.1	.0
Non Urban Aid (575)	16.9	7.1	9.2	12.5	17.6	11.7	14.1	11.0

ENROLLMENT DECLINE:

STATE POLICY OPTIONS AND FISCAL IMPACTS

SURVEY OF STATE RESPONSES TO ENROLLMENT DECLINE

OVERVIEW OF POLICY OPTIONS

The financial impact of enrollment decline is thought to be most immediately observable in the area of state aid to local public school districts. Since state aid to education - particularly state equalization aid - is linked by formula to some measure of resident enrollment (as in New Jersey) or average daily attendance, school districts with sharply declining enrollments may be immediately faced with declining shares of state aid, particularly where formulas are based inflexibly on current year pupil counts.

Enrollment declines also have serious negative consequences for school districts because many of the costs borne by these local districts tend to be relatively "fixed" over a period of time. In a period of already scarce fiscal resources, it is likely that an increasing proportion of a district's expenditure per pupil will have to be devoted to these fixed costs. In addition, as enrollments decline, a portion of these overall fixed costs come to represent the excess costs associated with excess capacity. Fewer pupils per facility (for example, a resource room) implies a certain amount of underutilization as well as an inefficient use of other "imputs" to education which complement the facility.

In point of fact, the period of the 1960's was generally one of expansion for public education,-- in terms of enrollments, expenditures, and educational programs. And New Jersey mirrored this trend.[1] With declining enrollments, however, many school districts in New Jersey, as well as across the nation, have found that facilities and programs appropriate to an expansionist period are now being underutilized (something we hope to document more fully in a later analysis). And at the same time, these facilities and/or programs cannot be easily eliminated or reduced in size, either because they (1) represent large capital expenditures (e.g., school buildings); (2) involve labor and teacher's unions and the difficult social, political and economic issues associated with reductions in force; and/or (3) involve special programs which, during the period of expansion, came to be associated with "quality" education in the minds of school administrators and parents.

The discussion above suggests that there exists a broad range of possible policy responses to enrollment decline (some of them obviously controversial) which might be used in conjunction with adjustments to state aid formulas. In fact, policies actually implemented (by those states which have begun to react to enrollment declines) are restricted for the most part to changes in their fiscal formulae. However, some states (most

notably Michigan and Minnesota) have begun to recognize a broader array of possibilities.[2] It should be useful to present briefly the major proposals and recommendations which have been made and which might be used in concert with adjustments to state aid formulas. Following this, a review of state fiscal/formula responses will be presented.

POLICY OPTIONS

Policies may be instituted and/or administered either at the state or at the district level.

1. State Level

   (a) Institutionalization of educational/demographic planning and monitoring; - Actual enrollment forecasting is best accomplished locally because of ease of access to vital statistics and familiarity with local population characteristics and growth trends. However, the state may provide incentives (or require districts to do long-range enrollment forecasts) and technical assistance in this area. In New Jersey, districts must now submit master plans for review by the state.[3] These plans include enrollment forecasts. Coordination of efforts with local planning agencies could also prove useful in meeting this objective.

   (b) Incentives to encourage regional or sub-regional cooperation, especially in the area of educational facilities: - Because of declining enrollments, some facilities or programs may serve too few students to be "cost-effective." However, the use of such a facility by more than one district may move the facility toward more efficient operation.

   (c) Incentives to encourage district reorganization or consolidation where enrollments fall below "specified levels": (determination of these levels would suggest an avenue for future research). In California, for example, schools deemed inefficient because of small enrollments, and "unnecessary" (because of the feasibility of consolidation), find per pupil state grants reduced by about $10. On the other hand, to encourage efficient school district organization, foundation programs for unified school districts are increased by $20/pupil.[4]

   (d) Linking of state teachers college enrollments to future estimates of public school enrollment: It should be noted that political and/or bureaucratic obstacles could be encountered insofar as one of the

goals of teachers colleges may be to maintain high enrollments in spite of reduced demand for teachers within the school system.

(e) Incentives to encourage early retirement by teachers and/or staff and administrators: Here state initiated incentives would involve financial aid to school districts for severance pay and/or pension fund contributions. At the same time, states could be asked to increase and improve oversight and claims procedures where termination disputes arise.

2. District Level

(a) Changes in district budget and management practices to encourage maximum use of demographic forecasts.

(b) Reorganization of grade structures to accommodate differential enrollment patterns among grade levels. Because birth rates (and other factors influencing public school enrollment) have "crests" and "troughs" sharp enrollment declines (or increases) will tend to affect one or two age cohorts at a time. This means that some grades will have few pupils compared to other grades. Thus, more efficient use of resources (both facility and teacher) may occur where pupils from two (or more) of the traditional grades are combined.

(c) Teacher effectiveness training for flexibility; i.e., flexibility to shift grade assignments according to shifting enrollment patterns among grades.

(d) School closings: This option is clearly the most controversial - and no doubt the most "last ditch" of the policy options. Related to school closings are the various proposals for re-cycling underutilized buildings for such things as community facilities. While this paper will not deal with this issue beyond simply mentioning it, there are a few published articles which provide a relatively thorough treatment of the topic.[5]

OVERVIEW OF THE STATE FISCAL RESPONSES TO ENROLLMENT DECLINE

Nineteen states have been identified by the Education Commission of the States as having made changes in their state-aid formulae in response to enrollment declines.[6]

Arizona - Districts may use the previous year average daily membership when it is greater than estimated ADM for the budget year.

Arkansas - State aid in Arkansas consists of "base-aid" which is equal to the amount received in the base year (1975-76), plus equalization aid. In the event of an enrollment decline, base-aid is adjusted to compensate.

California - A district experiencing an enrollment decline may increase the district revenue limit be adding to its current average daily attendance in the following manner:

a) When the reduction in average daily attendance is less than one per cent of the preceding year average daily attendance, no adjustment is allowed.

b) When the reduction in average daily attendance is greater than one per cent the preceding year, the estimated average daily attendance of the budget year may be increased by 75 per cent of that difference in the first preceding year and commencing with the 1978-79 fiscal year, 50 per cent of the difference in the second preceding year. The latter amount times the revenue limit per unit of ADA becomes an addition to the revenue limit. However, according to law, the resulting additional ADA figure may not be used to compute state apportionments. Thus, districts may increase spending limits to compensate for losses in enrollment, but no additional state aid is given.

Colorado - A district may use the greater of:

a) Current ADA;

b) Previous year's ADA;

c) The average of the previous 3 year's ADA

Idaho - A district with a total weighted ADA greater than three per cent less than the previous year may use the previous year's ADA less three per cent of that figure.

Illinois - Districts may use the greater of:

a) Current year weighted average daily enrollment (WADA) (excluding Title I pupils);

b) The average of the precious three year's WADA.

Indiana - Individual school districts have the option of using current year or previous year enrollment.

Iowa - Districts with declining enrollments may compensate for these losses by adjusting enrollment figures according to the following formula:

a) If enrollment loss is equal to or greater than five per cent, then:

ADJUSTED ENROLLMENT = CURRENT ENROLLMENT + (.50 .05 (base year enrollment) + .25 loss - .05 (base year enrollment)

b) If enrollment loss is less than than 5 per cent, then:
ADJUSTED ENROLLMENT = CURRENT ENROLLMENT + .50 loss

Kansas - If district enrollment declines between five and ten per cent, the previous year figure may be used. The actual percentage benchmark depends upon the district's enrollment category. Districts with enrollment declines exceeding these amounts are expected to make program adjustments to accommodate the membership loss. No additional aid, then, is provided for declines greater than the benchmark figure.

Kentucky - The prior year end of year ADA is used to calculate foundation program units.

Michigan - Categorical aid is distributed to districts in proportion to a decline in enrollment in excess of two per cent.

Minnesota - Extra "pupil units" are granted when a decline in weighted ADM from the previous year occurs. The number of these extra units is the larger of:
a) Sixty per cent of the decline;
b) The difference between the average of the previous three years ADM and the current year ADM.

Mississippi- Districts may use the larger of:
a) Current year ADA divided by 27;
b) Ninety-five per cent of previous year ADA divided by 27. Aid is computed on the basis of "teacher units" rather than pupil units. Twenty-seven represents average (although not necessarily optimum) class size.

New York - While New York school finance law does not explicitly address the issue of enrollment decline, an indirect provision is present in that the State does have a district "hold-harmless" provision. This prevents a district from receiving less state aid than in the previous year.

Ohio - Districts may use the average ADM for the previous three years.

Oregon - Districts are paid a flat grant of $295 for each weighted pupil lost from average daily membership. For purposes of measurement, current year enrollment is a December 31 count, while previous year enrollment is a June 30 figure.

Rhode Island - Losses in state aid due to enrollment decline are mitigated by hold-harmless provisions which guarantee that a district receive no less than 90 per cent of its previous year entitlement.

South Dakota - South Dakota uses average state enrollment decline as its benchmark. If an elementary or secondary school district's enrollment declines by a percentage greater than the statewide average decline, district pupil count is based on the average of the preceding two years.

Washington - Beginning in fiscal year 1978-79, additional compensation will be paid districts with declines greater than four per cent or declines in excess of 300 students.

RELEVANCE OF STATE FISCAL RESPONSES FOR NEW JERSEY

Of the nineteen states which have enacted fiscal responses to enrollment declines, fourteen contain some kind of "hold-harmless" provision. In the case of New York and Rhode Island, the law simply ensures that no district receive less state education aid in a current fiscal year than it did in the previous year, for whatever reason. In the rest, specific provisions are made which prevent districts from losing as much state aid as would otherwise result from a sharp decline in enrollment. Formula adjustments appear to have two purposes: (1) to give districts more time to reduce their operating budgets judiciously (i.e., to permit them to reduce spending in areas where costs tend to be both "fixed" over a short period of time and yet which are associated with excess capacity) by using enrollment figures from the previous year or the prior three years; and (2) to cushion districts against sharp and sudden losses of state aid where enrollment declines have also been sharp and sudden, by using moving averages or moving weighted averages of enrollment from the previous three years (much as income tax laws allow taxpayers to employ income "averaging" where sharp one year increases in income would otherwise catapult an individual into a high tax bracket).

For New Jersey, what could be the implications of declining enrollments under current fiscal formulas? This information would represent a useful policy tool in considering revisions to New Jersey's equalization aid mechanisms.

Decision-makers will certainly want to know approximately how much it will cost (in increased state aid to districts) to build cushioning or hold-harmless provisions into state equalization aid formulas in the future - given projected enrollment declines based on recent history. Currently, the Office of Economic and Fiscal Planning of the Division of Operations, Research and Evaluation is preparing a simulation which hopes to estimate these costs five years into the future. The simulation will be useful in comparing costs and relative impacts on the State's 602

school districts under current formulas against several alternative fiscal formulas having hold-harmless or cushioning provisions.

IMPACT OF ENROLLMENT DECLINE ON EQUALIZATION AID CALCULATION IN NEW JERSEY

Tables 1.a and 1.b through 6.a and 6.b illustrate the impact of declining enrollment on equalization aid calculations for hypothetical New Jersey school districts under varying conditions. The loss of aid resulting from a given enrollment decline will depend on several factors. The districts' wealth per pupil in the first year and the change in wealth from the first year to the second year will influence the change in aid as a result of decline. In addition to these changes in district conditions, the change in equalization aid to the district will also be influenced by changes in the state guaranteed valuation and the state support limit. Depending on the combination of all these factors and the actual percentage decline in enrollment, a district can lose different amounts of aid. Under conditions which will apply in many districts, equalization aid can actually increase while enrollment is declining.

CONSTANT CONDITIONS WITH FIVE PER CENT ENROLLMENT LOSS

Tables 1.a and 1.b show the changes in total and per pupil aid for districts experiencing a five per cent enrollment decline with all other conditions held constant from the first to the second year. It is completely unrealistic to expect district NCEB and wealth and the state guaranteed valuation or state support limit to remain constant, but these examples show that the loss in state aid is greater for districts with higher wealth per pupil. The exception occurs when the district's wealth per pupil is greater than the guaranteed valuation, in which case the percentage loss in aid is equal to the percentage loss in enrollment. The examples also show how districts with higher NCEB's lose greater percentage of their total aid.

CONSTANT CONDITIONS WITH TEN PER CENT ENROLLMENT LOSS (Tables 2.a and 2.b)

With the same conditions but a larger loss of enrollment, low wealth districts will experience a greater loss in total aid and aid per pupil. However, moderate wealth districts, whose equalized valuation per pupil is pushed above the guaranteed valuation by their loss in enrollment, will lose less equalization aid than they would have with a smaller decline in enrollment.

STABLE ENROLLMENT WITH INCREASING PROPERTY WEALTH (Tables 3.a and 3.b)

This set of examples, and the following ones in Table 4.a and 4.b, were developed to provide a benchmark for evaluating the effect of enrollment decline on equalization aid under a more realistic set of the conditions. In the examples in Table 3.a and 3.b, it was assumed that the districts' NCEB's and state support limit were constant but the districts' wealth and the state guaranteed valuation were increasing moderately. Equalized valuation was assumed to be rising by five per cent and the state guaranteed valuation by 7.5 per cent. Under these conditions, equalization

aid increased for all districts but climbed most sharply for the moderate wealth districts. An interesting case is provided by the high NCEB, high wealth district in the example. In the first year it is a minimum aid district but in the second year, because the guaranteed valuation grew faster than the district's equalized valuation, it was no longer a minimum aid district and its aid grew by 21 per cent.

STABLE ENROLLMENT WITH INCREASING PROPERTY WEALTH AND INCREASING NCEB's (Table 4.a and 4.b)

With district NCEB and the state support limit increasing along with increases in district wealth and the guaranteed valuation, equalization aid increases at a more rapid rate.

DECLINING ENROLLMENT (five per cent decline) WITH INCREASING PROPERTY WEALTH AND INCREASING NCEB's (Tables 5.a and 5.b)

Here we see the effects of declining enrollment under a fair realistic set of assumptions. Low wealth, low spending districts actually show a slight increase in total equalization aid. Higher wealth and higher spending districts lose aid. The percentage loss of aid increases as districts move toward the guaranteed valuation until districts reach the equalized valuation per pupil, which puts them in the category of minimum aid districts. At this point the percentage loss in aid drops substantially. In this example it is important to note that a five per cent enrollment loss in one year is a very substantial loss. Relatively few districts will experience that large a loss in a single year.

DECLINING ENROLLMENT (2.5 per cent decline) WITH INCREASING PROPERTY WEALTH AND INCREASING NCEB's (Tables 6.a and 6.b)

This example is identical to the example provided in Tables 5.a and 5.b except the rate of enrollment decline is smaller. With a smaller decline in enrollment, total aid and aid per pupil actually increase for all categories of districts. The increases are smallest for districts with equalized valuations per pupil close to but not yet at the point where the districts are classified as minimum aid districts. Of the examples developed, this is probably the most realistic one in terms of the combination of assumptions regarding growth in NCEB, state support limits, equalized valuation and guaranteed valuation. As is apparent, districts so situated are not severely affected, at least not in terms of a loss of equalization aid.

CONCLUSION

These examples have not exhausted all the logically possible conditions which districts experiencing enrollment decline might be facing. For example, a significant number of districts might be enjoying a growth in equalized valuation more rapid than the growth in the state guaranteed valuation. Districts with more rapid growth in their equalized valuation would be more likely to lose aid as a result of enrollment decline. This would be due to a decline in their district state support ratio. The one conclusion which is apparent from this analysis is that the impact of declining enrollment will depend on the rate of increase in the guaranteed valuation and the state support limits and on the district's particular changes in its equalized valuation and net current expense budget. Further research in this area will allow us to determine how many New Jersey districts are actually losing aid as a result of enrollment decline, and how many are not.

References

[1]For example, using the level of expenditure on capital outlay as an index of expansion in public education, it is found that for the nation as a whole, the percent of all education expenses devoted to capital outlay was as high as 14.3 percent for 1965-66; this figure has since declined steadily to 8.7 per cent in 1973-74. (NCES, Digest of Educational Statistics, 1976). In New Jersey, the percentage in 1965-66 was 13.7 per cent and by 1973-74, 8.8 per cent. Enrollments have tended to operate on a delayed cycle, so that for New Jersey total public school enrollments peaked in the 1971-72 year, and have declined at an accelerated pace since then.

[2]Most of these policy alternatives have been urged by enrollment decline study groups in states other than New Jersey. These included: A Final Report to the Minnesota State Legislature: The Impact of Fluctuating School Enrollments on Minnesota's Educational System. January, 1977. Michigan School Enrollment Decline-Projections and Implications; A Report of the Michigan Department of Education Task Force, 1977. Arizona Department of Education, Declining Enrollment Conference Report, June, 1977.

[3]New Jersey Administrative Code, 6:22-2.9.

[4]James W. Briggs and Donovan Main, "Serrano II - A Case of Missed Opportunities", Hastings Constitutional Law Quarterly, Summer, 1977.

[5]City of New York. Department of City Planning. "Surplus School Space; Some Facts About Re-use". June, 1977

Leonard Bornstein, "Deciding to Close a School: Economics or Political Process?" New Jersey School Leader. 7:3, November/December, 1977. pp. 11-13

[6]Education Commission of the States, 1975 State Education Legislation, October, 1976

Education Commission of the States, Education Finance Center. School Finance at a Third Glance, January, 1978

[7]California Education Code: 42000-42239, Chapter 5.5, 1978

Table 1.a.: Change in Total Equalization Aid with a 5% Loss in Enrollment (assuming constant NCEB, State Support Limit, Guaranteed Valuation and District Tax Base).

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000			$1,800,000		
	1000 PUPILS	950 PUPILS	CHANGE	1000 PUPILS	950 PUPILS	PERCENT CHANGE
$50,000	757,798	723,998	-4.5	893,119	810,619	-9.2
$75,000	436,697	385,997	-11.6	514,679	432,179	-16.0
$95,000	179,817	156,750	-12.8	211,927	156,750	-26.0
$98,100	165,000	156,750	-5.0	165,000	156,750	-5.0

Table 1b.: Change in Equalization Aid Per Pupil

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000			$1,800,000		
	1000 PUPILS	950 PUPILS	PERCENT CHANGE	1000 PUPILS	950 PUPILS	PERCENT CHANGE
$50,000	758	762	+0.5	893	853	-4.4
$75,000	437	406	-7.1	515	455	-11.7
$95,000	180	165	-8.3	212	165	-22.2
$98,100	165	165	0	165	165	0

Parameters:
Initial enrollment= 1000 pupils
Guaranteed Valuation per pupil= $109,000
S.S.L.= $1650

Table 2a: Change in Total Equalization Aid with a 10% Loss in Enrollment (assuming constant NCEB, State support limit, guaranteed valuation and district tax base).

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000			$1,800,000		
	1000 PUPILS	900 PUPILS	PERCENT CHANGE	1000 PUPILS	900 PUPILS	PERCENT CHANGE
$50,000	757,798	686,442	-9.4	893,119	728,119	-18.5
$75,000	436,697	329,664	-24.5	514,679	349,679	-32.1
$95,000	179,817	148,500	-17.4	211,927	148,500	-29.9
$98,100	165,000	148,500	-10.0	165,000	148,500	-10.0

Table 2b: Change in Equalization Aid Per Pupil

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000			$1,800,000		
	1000 PUPILS	900 PUPILS	PERCENT CHANGE	1000 PUPILS	900 PUPILS	PERCENT CHANGE
$50,000	758	762	.5	893	809	-9.4
$75,000	437	366	-16.2	515	389	-24.6
$95,000	180	165	-8.3	212	165	-22.2
$98,100	165	165	0	165	165	0

*Table 3.a. Change in Total Equalization Aid with Constant Enrollment (assuming constant NCEB; 7.5% increase in guaranteed valuation; 5% increase in district tax base).

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000		PERCENT CHANGE	$1,800,000		PERCENT CHANGE
$50,000 $52,500	757,798	772,733	+2.0	893,119	910,721	+2.0
$75,000 $78,750	436,697	459,100	+5.1	514,679	541,082	+5.1
$95,000 $99,750	179,817	208,193	+15.8	211,927	245,370	+15.8
$98,100 $103,005	165,000	169,302	+2.6	165,000	199,535	+20.9

Table 3.b. Change in Equalization Aid Per Pupil*

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000		PERCENT CHANGE	1,800,000		PERCENT CHANGE
$50,000 $52,500	758,000	773,000	+2.0	893,000	911,000	+2.0
$75,000 $78,750	437,000	459,000	+5.0	515,000	541,000	+5.0
$95,000 $99,750	180,000	208,000	+15.6	212,000	245,000	+15.6
$98,100 $103,005	165,000	169,000	+2.4	165,000	200,000	+21.2

Initial G.V. = $109,000
New G.V. = $117,175

*Differences in percentages between 3a and 3b due to rounding error.

Table 4.a. Change in Total Equalization Aid with Constant Enrollment (assuming 5% increase in NCEB and district tax base; 7.5% increase in guaranteed valuation and state support limit).

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000			$1,800,000		
	1,400,000	1,470,000	PERCENT CHANGE	1,800,000	1,890,000	PERCENT CHANGE
$50,000	757,798		+7.1	893,119		+9.7
$52,500		811,370			979,715	
$75,000	436,697		+10.4	514,679		+13.1
$78,750		582,055			582,073	
$95,000	179,817		+12.6	211,927		+24.6
$99,750		218,603			263,959	
$98,100	165,000		+7.7	165,000		+30.1
$103,005		177,767			214,651	

Table 4.b. Change in Equalization Aid Per Pupil*

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000					
	1,400,000	1,470,000	PERCENT CHANGE	1,800,000	1,890,000	PERCENT CHANGE
$50,000	758		+7.1	893		+9.7
$52,500		811			980	
$75,000	437		+10.4	515		+13.1
$78,750		482			582	
$95,000	180		+21.6	212		+24.6
$99,750		219			264	
$98,100	165		+7.7	165		+30.1
$103,005		178			215	

Initial G.V. = $109,000
New G.V. = $117,175

*Differences in percentages between 4a and 4b due to rounding error

Table 5a: Total Equalization Aid with 5% Enrollment Decline (assuming NCEB, district tax base increase 5%; guaranteed valuation and S.S.L. increase 7.5%).

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000	$1,470,000		$1,800,000	$1,890,000	
	1000 PUPILS	950 PUPILS	PERCENT CHANGE	1000 PUPILS	950 PUPILS	PERCENT CHANGE
$50,000	757,798		+2.5	893,119		-2.4
$52,500		776,705			890,965	
$75,000	436,697		-1.5	514,679		-4.1
$78,750		430,057			493,323	
$95,000	179,817		-15.1	211,927		-17.3
$99,750		152,739			175,209	
$98,100	165,000		-2.1	165,000		-2.1
$103,005		168,625			168,625	

Table 5b: Change in Equalization Aid Per Pupil

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	$1,400,000	$1,470,000		$1,800,000	$1,890,000	
	1000 PUPILS	950 PUPILS	PERCENT CHANGE	1000 PUPILS	950 PUPILS	PERCENT CHANGE
$50,000	758		+7.9	893		+5.0
$52,500		818			938	
$75,000	437		+3.6	515		+.8
$78,750		453			519	
$95,000	180		-10.7	212		-13.0
$99,750		161			184	
$98,100	165		+7.6	165		+7.6
$103,005		178			178	

Initial G.V. $109,000 Initial S.S.L. = 1,650
New G.V. $117,175 New S.S.L. = 1,775

Table 6a: Change in Total Equalization Aid with a 2.5% Enrollment Decline (NCEB & Tax Base Increasing 5%; SSL & G.V. increasing 7.5%).

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	1,400,000 1000	1,470,000 975	PERCENT CHANGE	1,800,000 1000	1,890,000 975	PERCENT CHANGE
50,000	757,798		+4.8	893,119		+4.7
52,500		794,482			935,340	
75,000	436,697		+4.6	514,679		+4.5
78,750		456,723			537,698	
95,000	179,817		+3.7	211,927		+3.6
99,750		186,515			219,584	
98,100	165,000		+4.9	165,000		+4.9
103,005		173,063			173,063	

Table 6b: Change in Equalization Aid Per Pupil

TOTAL EQUALIZED VALUATION (in 1,000's)	TOTAL NET CURRENT EXPENSE BUDGET					
	1,400,000 1000	1,470,000 975	PERCENT CHANGE	1,800,000 1000	1,890,000 975	PERCENT CHANGE
50,000	758		+7.5	893		+7.4
52,500		815			959	
75,000	437		+7.1	515		+7.0
78,750		468			551	
95,000	180		+6.1	212		+6.1
99,750		191			225	
98,100	165		+7.9	165		+7.9
103,005		178			178	

Old G.V. 109,000
New G.V. 117,175

Old SSL 1650
New SSL 1775

OPTIONS FOR UTILIZATION OF SCHOOL FACILITIES IN DISTRICTS WITH DECLINING ENROLLMENTS

INTRODUCTION

The phenomena of declining student enrollment is being faced by many districts in New Jersey. The causes are many and varied. They include attitudes toward child-bearing by married couples; the declining birth rate-family size; the general economic conditions resulting in the delay of housing start-ups; the cancellation of housing projects for environmental reasons; and other reasons which are peculiar to a specific district or personal to individuals.

It should be noted, however, that approximately 100 districts in New Jersey still report student population growth. Also, demographers at the University of Southern California, and others, have uncovered a changing attitude on the part of married couples in the 28-35 age bracket who now report a desire to have two/three children. The potential is another "baby boom" which would impact upon schools in the next five to seven years.

Nevertheless, the enrollment decline phenomena does now face New Jersey. One of the school variables affected is district facilities. Several options exist which are outlined below.

Before selecting any option, or combinations thereof, a district should determine the criteria for closing any building, or part of a building. Some of the criteria are:

1. Economy: dollar savings
2. Public satisfaction
3. Sound management
4. Consolidation of programs leading to improvement
5. To implement a desegregation plan in concert with declining enrollment
6. Solely declining enrollment

OPTION I - DIVEST OR SELL

I. Under what conditions?

   A. If there is certainty that a school will no longer be needed AT ANY POINT IN THE FUTURE

   B. A school has reached a negative cost-effective point regarding maintenance
      1. research indicates this onset at about 45 years; however, district records on maintenance costs are the best indicator

   C. A school cannot be renovated to be physically and/or educationally adequate as determined by an in-depth evaluation

1. the Department offers safety consultation through the Bureau of Facility Planning
2. formulas exist to facilitate the decision as to the cost-effectiveness of renovation such as the one developed by Educational Facilities Laboratories, Inc., and included as Appendix A

D. There is understanding and agreement to sell or divest by the public. Alternatives to obtaining such agreement vary and include the formation of task forces, the appointment of ad hoc study groups, the holding of a non-binding referendum, public hearings and polling the residents via questionnaire. This list is by no means exhaustive.

II. How?

A. Have a building assessed by qualified real estate evaluators; at least three assessments should be considered.

B. Conduct open bid and sale under existing laws
1. reference 18A: 20-5, 18A: 20-6.

C. Conduct restricted bid and sale, i.e., accept no sale price less than assessments, under existing laws
1. reference 18A: 20-7

D. Sell a building outright
1. reference 18: 20-2

E. Transfer title to another municipal agency or civic organization
1. reference 18A: 20-9

OPTION II - TAKE OUT OF USE-RETAIN OWNERSHIP

I. Under what conditions?

A. If population projections indicate that a building, though not needed currently, will be needed in the future.

B. If a school has been evaluated as physically safe.

C. If a school has been evaluated as educationally adequate, or capable of being renovated to a state of educational adequacy.

D. If a school is, and is projected to remain, cost effective relative to maintenance.

II. How?

A. Lease a school to municipal agencies or private business while retaining title to it.

1. reference 18A: 20-2
2. use part of a school building for district students and lease other parts to public agencies whose activities will not interfere with school operation or can compliment it; this action approaches a community education use of a school building
3. use part of a school building for district students and lease other parts to private agencies or business whose activities will not interfere with the safe operation of the school

OPTION III - CHANGE USE OF BUILDING FOR DISTRICT PURPOSES - INSTRUCTIONAL AND/OR NON-INSTRUCTIONAL

I. Under what conditions?

A. Basically the same as for Option II

II. How?

A. Totally, to satisfy other space needs of the district such as for a school for the multiply-handicapped, offices, others

B. Partial, to satisfy instructional facilities needs related to specific program provisions such as for art, music, small group instruction.

APPENDIX A

DETERMINING THE FEASIBILITY OF MODERNIZING A SCHOOL VERSUS REPLACEMENT

A rule of thumb in determining the feasibility of modernizing a school versus replacing it states that if the cost of modernization exceeds 50 percent of the replacement cost, then modernization is questionable.

But more precise methods of cost comparisons can be applied that follow long-established principles of engineering economy. From a pure dollars and cents point of view, the practical question in replacing any machine or structure is not "How old is it?" but "What will it cost if it is continued in service, and what will it cost to replace?".

Rather than merely considering the initial costs of new or remodeled construction, a replacement economy study compares the equivalent annual costs over the prospective life of a new building against the annual costs connected with retaining and renovating an existing building over its expected economic life.

The point is one that many architects have been telling their clients for years. Initial construction cost is not the full story in the overall economy of a school building. Depreciation, operating and maintenance expenses, interest and efficiency of use are all potent factors effecting long term financial value.

The following hypothetical and simplified example is presented as illustration.

An outdated elementary school can be modernized to adequately meet its demands for the next 20 years at a cost of $600,000. The existing school has a present net market value, consisting primarily of its land value, of $200,000. After 20 years, at the end of its useful life, its net market value is also estimated at $200,000.

On the other hand a new replacement elementary school can be built on a new site for $1,500,000., including land purchase and all fees, etc. The useful life span of the new school is estimated to be 50 years, at which time its net salvageable value is also $200,000.

The additional annual cost for maintenance, operations, interest and other administrative expenses for the old school over the new is $2000. Interest is assumed at 6 percent per annum.

In this instance, even with a useful life of only 40 percent that of a new school, the modernized school is the better financial investment by a substantial margin.

This type of comparative analysis seems particularly valid when a school system is making an overall appraisal of all its facilities, and such comparisons can be used to explain the long-range consequences of proposed actions.

Comparative annual costs

new school	Depreciation = $\frac{\$1,500,000 - \$200,000}{50}$ =	$26,000
	Average Interest $\$(1,500,000 - 200,000)\frac{0.06}{2}$ + $200,000 (0.06) =	$51,000
	Capital Recovery	$77,000
modernized school	Depreciation = $\frac{\$(200,000 + 600,000) - \$200,000}{20}$ =	$30,000
	Average Interest $\$(800,000 - 200,000)\frac{0.06}{2}$ $200,000 (0.06)	$30,000
	Capital Recovery	$60,000
	Additional Annual Operating Expenses	$ 2,000
	Total	$62,000

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